S/137/62/000/005/015/150
A006/A101

AUTHOR: Kožený, J.

TITLE: Electromagnetic mixing of steel in electric arc furnace

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 48-49, abstract 5V290 ("Elektrotechnik", 1961, v. 16, no. 9, 256-258, Czech; Russian and German summaries)

TEXT: The electromagnetic device for the mixing of steel in electric arc furnaces operates on the principle of asynchronous motor. Underneath the bottom of an electric-arc furnace there is a flat (or chambered, according to the bottom shape) stator with a winding of several turns. The current frequency feeding the stator should be 1.5 - 0.3 cycles for 10 - 180 ton electric arc furnaces. The velocity of steel motion in the pool is 10 - 60 cm/sec. The active mixing power of steel in 10 - 180 ton electric arc furnaces is 10 - 40 kw, and the apparent power is 150 - 800 kvamp; $\cos\varphi$ is very small (0.1 - 0.5) which is a serious deficiency of induction mixing. The cooling of stators, prevalently water-cooling, is required due to the considerable heating by irradiation from the electric arc furnace case (by 50 - 80°C) and great losses in the winding turns.

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S/137/62/000/005/015/150
A006/A101

Electromagnetic mixing of steel...

Electric power consumption for mixing is, according to data supplied by ASEA (Sweden), for 30-ton electric-arc furnaces as high as 12 kw-h/t of steel; up to 20 kw-h by taking into account electric power for cooling and other purposes, or about 3% electric power consumption for melting. However, mixing makes it possible to reduce the melting time by 20 - 30 min which yields savings about 50 kw-h/t. On the whole, the savings exceed by a factor of 2.5the excess of electric power consumption for mixing. The daily efficiency of electric arc furnaces increases on the average by 10%. Purely metallurgical advantages of mixing are: acceleration and improving of desulfurization and slag removal; reduced P content in the steel; better homogeneity of the steel and improved utilization of alloying elements.

S. Glebov

[Abstracter's note: Complete translation]

Card 2/2

KOZENY, M.; VELICH, V.

Polarographic behavior of monoazo dyes and their fastness to light.
Coll Cz Chem 25 no.4:1031-1036 Ap '60. (EEAI 9:12)

1. Institut fur physikalische Chemie, Technische Hochschule fur Chemie, Pardubice.
(Polarograph and polarography)
(Azo dyes)

41199

S/194/62/000/007/019/160
D222/D309

AUTHORS: Kohoutek, Jindřich, and Koženy, Olaf

TITLE: Polarized relay using ferrites as the source of a constant magnetic field for use in the memory units of electronic computers

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-1-87 zh (Czech. pat., cl. 21g, 4/01, 21 a[1], 20/01, no. 9784, Nov. 15, 1960)

TEXT: A miniature polarized relay is patented, in which the source of a constant magnetic field is a ferrite core. The essence of the device (see figure) is in making the body 1 of the coil 11 out of plastic and fastening inside the body the pole pieces 2, made of ferromagnetic material and separated by the isolating insert 8. These pole pieces are also used as current conducting elements for the coil 11. At the free bent endings are located the contacts 7 and the soldering lugs 6 to connect the supply to the relay. Between the contacts 7 is located the armature 5 of the tongue type, fastened on the electrical conductor bridge 3 on which there are

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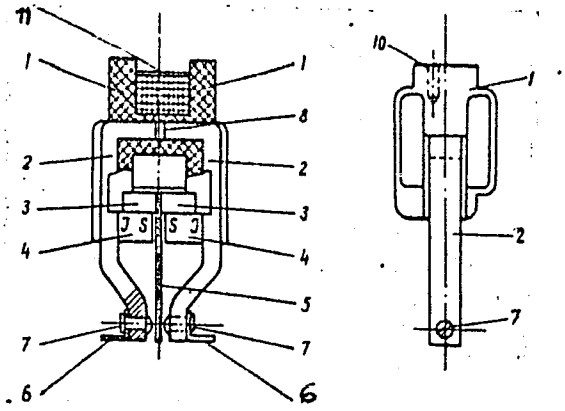
S/194/62/000/007/019/160
D222/D309

Polarized relay using ferrites ...

also soldering lugs. The bridge 3 is fastened to the inner side of the body 1. The ferrite elements 4 fit directly to the pole pieces 2, but because of their nonconducting nature they are electrically isolated from them. The relay is mounted by means of the hole 10 in the body 1 of the coil. The polarity of the ferrite elements is shown on the figure (I-S, S-N). 2 figures. [Abstracter's note: Complete translation.]

Fig.



Card 2/2

41759

S/194/62/000/008/005/100
D201/D308

AUTHORS: Kohoutek, Jiřídřich, and Koženy, Olaf

TITLE: A polarized relay for computers

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1962, abstract 8-2-14 e (Czech. pat., cl. 21 g, 4/01; 21a[1], 20/01, no. 98161, Jan. 15, 1961)

TEXT: The construction of the polarized relay proposed is based on two stamped H-shaped isolating components joined together. The recesses of two components contain the elements of the magnetic circuit: the tie-piece contains the core of the control winding, the longitudinal bays contain the reed armatures. Between the ends of the bays are the polarization systems with permanent magnets. The external surface of the bays and of the tie-piece form a frame for the output winding. The winding, the contact terminals and other components are situated within the limits of this frame which makes it possible to place the relays close to each other. 5 figures. [Abstracter's note: Complete translation.]

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S/194/62/000/010/015/084
A154/A126

AUTHORS: Kohoutek, Jindřich, Kožený, Olaf

TITLE: A miniature polarized relay

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962, 52, abstract 10-1-1041 (Czech. pat., cl. 21a[1], 20/01; 21g, 4/01, no. 99327, April 15, 1961)

TEXT: This patented miniature polarized relay, intended for use in relay computers, is distinguished by simple design, small dimensions, ease of assembly and installation, and high technical parameters. The relay coils, magnets, contacts and other elements are press-fitted, which ensures sufficient mechanical strength and greatly reduces the number of separate elements. The relay is enclosed in a protective casing made of a transparent material, such as glass, which makes hermetic sealing possible. To increase the operating reliability of the relay, the inner cavity of the casing is filled with neutral gas, which makes the operation and parameters of the relay independent of external conditions and makes it suitable for use in tropical conditions. There are 3 figures.
[Abstracter's note: Complete translation] I.P.

Card 1/1

KOZERA, Alfons; MROZEK, Kazimierz

Theory on the geological structures in the zone of great gradients of the gravity force in the territory North-West of Radomsk. Przegl geol 10 no.1:33-37 Ja '62.

KOZERA, Alfons, mgr inz.

Connection of the seismic and gravimetric prospecting results with the geological structure of the Tuszyn-Belchatow region. Nafta Pol 18 no.12:324-327 D '62.

1. Biuro Dokumentacji i Projektowania Geologicznego Przemyslu Naftowego, Warszawa.

KOZERA, Alfons, mgr inz.

Modeling geological structures by calculative-mechanical methods in gravimetric surveying. Nafta Pol 19 Special issue:6-16 19-26 Je '63.

1. Biuro Dokumentacji i Projektow Geologicznych, Krakow.

POLAND/Cultivated Plants. Fodder Plants. H

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68225

Author : Borkowski, Roman; Kozera, Gotfryd
Inst : -
Title : Moisture Requirements and Drought-Resisting Ability of Sweet Clover.

Orig Pub : Roczn. nauk rolniczych., 1956, A73, No 4, 623-637

Abstract : For three years, pot experiments were conducted with soil moisture at 20, 30, 40, 50, and 60 percent of total moisture capacity. The higher the soil moisture level, the larger the yield of mass above ground. As soil moisture declined, the root systems of the plants were seen to develop more strongly, and as soil

Card : 1/2

77

POLAND/Cultivated Plants. Fodder Plants. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68225

moisture rose, the above-ground mass developed. With soil moisture at 20 percent and 30 percent for 21 days, sweet clover either did not reduce its yield of above-ground mass or reduced it to an insignificant extent. -- Ye. M. Tsvetayeva

Card : 2/2

ACC NR: AP7006085 (A) SOURCE CODE: CZ/0078/66/000/011/0024/0024

INVENTOR: Svejka, O. (Engineer; Pardubice); Kozera, J. (Engineer; Pardubice)

ORG: none

TITLE: [Solid-fuel propellant] CZ Pat. No. PV 7461-65

SOURCE: Vynalezy, no. 11. 1966, 24

TOPIC TAGS: solid propellant, solid rocket propellant, solid fuel, ammonium perchlorate, perchlorate

ABSTRACT: Authors describe a solid fuel for propelling model rockets, aircraft, or ships, based on ammonium perchlorate, distinguished by the fact that it contains 0.5 to 20% by weight of powdered zinc with 200-μ grain size, in addition to the basic fuel and catalyzer.

SUB CODE: 21/ SUBM DATE: 13Dec65

Card 1/1

KOZERA, St., inz.

New assortments in the agricultural machine industry in 1963.
Masz ciagniki 10 no.2:33-39 F'63

ACC NR: AT6036585 SOURCE CODE: UR/0000/66/000/000/0210/0211

AUTHOR: Kozerenko, O. P. 26

ORG: none

TITLE: Dynamics of physiological indices during the prolonged standing test in evaluating the functional state of the organism following prolonged experimental exposure to mechanical stressors [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 210-211

TOPIC TAGS: orthostatic test, space physiology, human physiology, isolation test, hypodynamia

ABSTRACT: The duration of experiments designed to recreate such spaceflight factors as isolation and hypodynamia is coming more and more to approach the actual duration of the proposed flights. The same is true of experimental "playbacks" of multiday flights. In this connection, functional tests acquire particular importance, since, as partial models of more complex experimental conditions, they make it possible to establish control over the state of the organism during a prolonged exposure and to evaluate its total effect on the basis of the results obtained both during the

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pre-experimental period and in the prolonged after-effect period.

In order to evaluate functional capacities of persons subjected to 7-day isolation and 3-day confinement in an enclosure of extremely small volume in a constrained posture, workers at the laboratory of F. D. Gorbov used a prolonged (20 min) standing test with multi-effector control (EKG, EEG, EMG, and BP) to study the characteristics of interaction between motor and vascular components during the accomplishment of purposeful locomotor activity and posture-maintenance activity in particular.

The effect of the above-mentioned experimental conditions was manifested as an uneven decrease in vascular and muscular tonus and the appearance of a state of asthenia which can be termed a lowering in cortical tonus.

Particular attention is directed not only to changes in the absolute values of pulse frequency, respiration, arterial pressure, and brain and muscle biopotentials, but also particularly to the dynamics of these indices during post-experimental testing. One general and characteristic result was the relative "stabilization" of the levels of physiological parameters following prolonged experiments. In place of the wave-like gradual

changes in these parameters which characterized all pre-experimental tests, there was a spasmodic shift to each new value.

Such shifts in the dynamics of the recorded indices indicate change in the mechanisms of physiological function regulation, which prior to the experiment assured the optimal reaction in each case. Most probably this consists in deterioration of the mechanisms assuring correction of the mean levels of functional indices.

For this reason, the dynamics of physiological parameters during post-experimental studies can be used as a criterion for evaluating the functional state of the organism. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

KOZERENKO, V. N. and LA[illegible]KO, Ye. M.

"The Question of the Presence of Alpine Instrusions in Priargunia (Eastern Zabaykal)," Dok. AN, 58, No. 9, 1947.

SO: Monthly List of Russian Accessions, Library of Congress, _____ 1953, Uncl.

KOZERENKO, V. N.

PA-67T42

USSR/Geology Mar/Apr 1948
Stratification
Tectonics

"The Stratigraphy and Tectonics of the Paleozoic and Pre-Cambrian Deposits of the Northern T'ien-Shan Area," V.N. Kozerenko, 16 pp

"Iz Ak Nauk SSSR, Ser Geolog" No 2

Author collected and used field data for his description of the stratigraphy and tectonics of the Pre-Cambrian and Paleozoic layers in wide area in the central part of the northern zone of T'ien-Shan. Points out synchronous nature of deposits

67T42

USSR/Geology (Contd) Mar/Apr 1948

based on nature of geologic faces. Determines the divisions of new mineral rock complex.

67T42

19814 KOZERENKO, V.N., LAZ'KO, YE.M. i MITICH, G. B.

O vozraste drevnikh svit Priargun'ya (Vostoch Noye Zabaykag'ye) Izvestiya Akad. Nauk SSSR, Seriya geol., 1949, No3, s.97-99

SO: LETOPIS ZHURNAL STATEY - No., 27, Moskva, 1949.

KOZERENKO, V. N.

PA 39/49T53

USSR/Geology
Petrology
Stratification

Mar 49

"Characteristics of Cimmerian Intrusions in the Southeastern Section of Southern Transbaikal," V. N. Kozerenko, Ye. M. Laz'ko, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 3

Discusses rock formations of 'Priargunskiy zone,' which is characterized by limited development of relatively narrow and weakly dislocated Jurassic deposits and presence of small Cimmerian intrusions. Submitted by Acad D. S. Belyankin, 1 Feb 49.

39/49T53

KOZERENKO, V. N.

KOZERENKO, V. N.; LAZARENKO, YE. K.; LAZ'KO, YE. M.; REZVOY, D. P.; VIKTOR ARSEN'YEVICH NIKOLAYEV; YERMAKOV, N. P.

"On the Occasion of His 60th Birthday and 35th Year of Scientific Activity," Minerlog. sb. L'vovsk. geol. o-va, No 7, 330-332, 1953

V. A. Nikoleyev, a corresponding member of the Academy of Sciences USSR, is one of the greatest specialists in the field of stratigraphy, vulcanism, and tectonics of Central Asia. He established the sharp tectonic boundary between the northern and southern zones of the T'ien-Shan Mountains, the so-called "most important structural line of the T'ien-Shan," or "line of Nikolayev." In recent years, Nikolayev has been occupied with working out the general problems of physicochemical petrology and the problems of the application of thermodynamics to the processes of magmatic crystallization and metamorphism. Especially important are his theoretical investigations into the field of systems with volatile components of the rock-forming silicate-water type. Study of the ternary systems gives an understanding of the processes governing the formation of hydrothermal and pneumatolite solutions.

RZhGeol, No 1, 1955

KOZLRENKO, V.N.

KOZERENKO, V. N., and MUSHNIKOV, A. F.

"Stratigraphy and Tectonics of the Southern Deposits of Eastern Transbaykal," Uch. zap. L'vovsk. Un-ta. ser. geol., 23, No 6, 29-41, 1953

In the Eastern Transbaykal region, the lower and middle Jurassic is divided into the following two coeval environmental complexes: marine and "Algacha" (i.e. coastal-marine and continental). The author distinguishes a third one, a cis-Argun continental complex, distinguished by variability of lithological properties and sharply decreasing thicknesses of deposits.

RZhGeol, No 1, 1955

KOZERENKO, V.N.

Some problems in endogenous metallogeny. Geol.sbor.[Lvov] no.1:227-251 '54. (MLRA 10:1)

1. Gosuniversitet imeni Ivana Franko, L'vov.
(Ore deposits)

15-57-2-1479

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 2, p 44 (USSR)

AUTHOR: Kozerenko, V. N.

TITLE: The History of Investigations on the Structure of the Eastern Trans-Baikal Region (K istorii izucheniya geologicheskogo stroyeniya Vostochnogo Zabaykal'ya)

PERIODICAL: V sb: Voprosy geologii Azii, Vol I, Moscow, Izd-vo AN SSSR, 1954, pp 686-705

ABSTRACT: Bibliographic entry

Card 1/1

KOZHENKO, V.N.

Geology and petrology of the southwestern extremity of the complex Kutomarskiy intrusive massif in eastern Transbaikalia. Nauk.zpa. L'viv.un. 31:62-83 '54 [i.e. '55] (MLRA 10:3)
(Transbaikalia--Rocks)

KOZERENKO, V.N.; HELOUSOVA, O.N.

Age correlation of intrusive complexes in the southeastern region of eastern Transbaikalia. Nauk. zap. L'viv.un. 31:164-184 '54. (MLRA 10:3)
[i.e. '55]. (Transbaikalia--Rocks, Igneous)

KOZERENKO, V.N.

Geological history of the Transbaikalia folding region during the Permian period. Nauk.Zap.L'viv.un. 35:41-57 '55. (MLRA 9:8)
(Transbaikalia--Geology, Stratigraphic)

KOZERENKO, V.N.; LAZ'KO, Ye.M.

Some problems on the geology of the Argun' region. Nauk.zap.L'viv. un. 35:176-186 '55. (MLRA 9:8)
(Argun' Valley--Geology)

KOZHENKO, V.M.; LUCHITSKIY, I.V., dotsent, nauchnyy redaktor; GAZER, S.L., redaktor izdatel'stva; SARANYUK, T.V., tekhnicheskiy redaktor

[Geological structure of the southeastern part of eastern Transbaikalia] Geologicheskoe stroenie iugo-vostochnoi chasti Vostochnogo Zabaikal'ia. [L'vov] Izd-vo L'vovskogo univ., 1956. 308 p. (MIRA 10:3)
(Transbaikalia--Geology, Structural)

KOZERENKO, V.N.

GOSZHEVSKIY, F.I.; KOZERENKO, V.N.

Regular features in the occurrence of polymetallic and rare-metal zones and belts. Geol.sbor.[Lvov] no.2/3:36-61 '56. (MLRA 10:3)

1. L'vovskiy gosuniversitet imeni Ivana Franko)
(Ore deposits)

KOZERENKO, V.N.; LAZ'KO, Ye.M.

Geological conditions for the formation of granitoids. Geol.sbor. [Lvov] no.2/3:114-121 '56. (MLRA 10:3)

1. L'vovskiy gosuniversitet imeni Ivana Franko.
(Rocks, Igneous)

KOZERENKO, W. N. and MUSHNIKOV, A. F.

"The Correlation Between Prospecting and Large-Scale Geological Surveys in Inaccessible Regions of Complex Geological Structure," Razvedka i okhrana nedr, No.9, pp. 30-33, 1956. L'vov State University.

Translation M-3,053,774

KOZERENKO, V.N.

Some basic problems of the geological structure of eastern Transbaikalia. Izv.AN SSSR.Ser.geol. 21 no.8:107-112 Ag '56. (Transbaikalia--Geology, Structural) (MLRA 9:11)

KOZERENKO, V.N.; MUSHNIKOV, A.F.

Correlations between prospecting and large-scale geological surveying in closed regions and the complexity of geological structures. Razved. i okh. nedr 22 no.9:30-33 S' 56. (MLRA 9:11)

1. L'vovskiy gosudarstvennyy universitet.
(Geology, Structural) (Geological surveys)

GORZHEVSKIY, D.I.; KOZERENKO, V.N.

On some regularities in the distribution of polymetallic and rare-metal deposits. Dokl.AN SSSR 107 no.5:723-726 Ap '56. (MLRA 9:8)

1. L'vovskiy gosudarstvennyy universitet imeni Iv. Franko. Predstavleno akademikom N.S. Shatskim.

(Ore deposits)

KOZERENKO, V.N.

Most significant middle Paleozoic structural elements in Transbaikalian folds. Geol. sbor. [Lvov] no.4:231-241 '57. (MIRA 13:2)

1.L'vovskiy gosuniversitet imeni Ivana Franko.
(Transbaikalia--Geology, Structural)

KOZERENKO, V. N.

AUTHOR: Kozerenko, V. N.

TITLE: On the Argun-Near Facies of Jurassic Deposits in East Transbaykalia (O priargunskoy fatsii yurskikh otlozheniy Vostochnogo Zabaykal'ya). 20-4-40/52

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 4, pp. 686-689 (USSR)

ABSTRACT: East Zabaykal'ye belongs to the Mongolo-Okhotsk mesozoic fold area which has a complicated structure. Among the lower and middle Jurassiv sediments three facial complexes are prominent:
1.) Marine clastic sediments characterized by their fauna, having a thickness of 3,5-4 km, in the central part of the East Zabaykal'ye;
2.) Specific accumulations of the so-called "Algachinskaya yura", which are of equal strength and are, on the whole, more roughly clastic, and are, above all, characterized by the remains of plants; roughly clastic continental sediments of considerably reduced thickness with a freshwater pelecypoda fauna and remains of plants. Works of recent years have shown that the facial complexes 1) and 2) are synchronous. Beside those mentioned above, the author sorted out a specific continental complex of jurassic sediments of the

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On the Argun-Near Facies of Jurassic Deposits in East Transbaykalia

20-4-40/52

argon-near facies in a strip between the settlements Nerchinskiy Zavod and Klichki. It is lithologically very variable and is sufficiently widely spread in East Zabaykai'ye. The fauna ascertained therein made it possible to determine the age. The present information is devoted to the characteristic of the above complex. It is connected with the "Alachinskaya Yura" by gradual transitions. The inter-relations between these two facial complexes may be seen from fig. 1. The author is of the opinion that the Argun-near facial complex corresponds to the upper part of the Alachinskiy cross section. This was confirmed by determination of the fauna. The sediments of the facial complex are located in synclinals: e.g. Savvo-Borzinskaya, in hollows, Kalganskaya and Chashino-Il'dikanskaya, and, in individual cases, in structures of the trench type. In such a case, e.g. South of the settlement of Nerchinskiy, there are 2 suites: the upper and the lower, which were sorted out by the author. The study of the very motley lithological composition leads to the conclusion that the sedimentation of the basal horizon occurred at many places on a considerably ramified relief. The

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rocks are of continental origin. In spite of its considerably motley character sufficiently distinct rules governing the distribution of the individual types of rock with respect to the great fold elements of the Jurassic age can be determined. They were uncovered only for the loewer sandstone suite. The Southwest wing of the synclinal structures are composed of clastic rocks which are more coarse than those of the Northwest. In the direction of the areas of the "Centroclinal Closing" ("tsentroklinal'noye zamykaniye") sediments become coarser and their thickness diminishes. This may be seen with particular clearness in the Kalganskaya syncline. The following conclusions may be drawn herefrom: The synclinal structures of the complex mentioned have been formed in the course of a process of sedimentation. The rocks of the complex had no coherent surface development. Their formation took place at the expense of the destruction of the adjoining sections of the paleozoic fundament. Sediments of the lower sandstone suite occupied a larger surface. The knowledge gathered recently made it possible to solve the question concerning he age of the sediments concerned. The

On the Argun-Near Facies of Jurassic Deposits in East Transbaykalia 20-4-40/52

fauna gathered near the village of Pokrovka contains 6 kinds of lamellibranchs and 1 kind of phyllopods originating from fresh water; their age is, without doubt, of the middle Jurassic. Also remains of flora gathered at various places of the Argun'-near facies must be classed as belonging to the middle Jurassic.
There are 1 figure, and 3 references, all of which are Slavic.

ASSOCIATION: State University imeni Iv. Franko L'vov (L'vovskiy gosudarstvennyy universitet im. Iv. Franko)

PRESENTED: June 11, 1957, by N. V. Shatskiy, Academician

SUBMITTED: June 10, 1957

AVAILABLE: Library of Congress

Card 4/4

KOZERENKO, V.N.

Principal geological characteristics of eastern Transbaikalia. Geol. sbor. [Lvov] no.5/6:291-313 '58. (MIRA 12:10)

1.Gosuniversitet imeni Ivana Franko, L'vov.
(Transbaikalia--Geology, Structural)

KOZERENKO, V.N.; LAZ'KO, Ye.M.; REZVOY, D.P.

Vladimir Mikhailovich Kreiter; on his 60th birthday. Geol. sbor. [Lvov] no.5/6:595-597 '58. (MIRA 12:10)
(Kreiter, Vladimir Mikhailovich, 1897-)

KOZERENKO, V.N.; MUSHNIKOV, A.F.

New data on the Jurassic stratigraphy of eastern Transbaikalia.
Pyt.geol. no.9:87-101 '58. (MIRA 13:4)
(Transbaikalia--Geology, Stratigraphic)

3(0)

AUTHORS: Kozerenko, V. N., Lokerman, A. A. SOV/20-123-6-38/50

TITLE: On Ordovician Deposits in South-Eastern Transbaykal (Ob ordovichskikh otlozheniyakh Yugo-Vostochnogo Zabaykal'ya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 1096-1099 (USSR)

ABSTRACT: The polymetallic ore deposits in the eastern Transbaykal are connected with Lower Paleozoic rocks. This fact makes the study of this complex particularly important. According to the geological fieldwork 1946-1951 (done by D. I. Gorzhevskiy, N. S. Gorshkov, V. N. Kozerenko, Ye. M. Laz'ko, G. V. Mitich, A. P. Mushnikov, a.o.), the Ordovician series in the mentioned area was divided into the following concordant lying suites (Ref 1): 1) Bystrinskaya (1000 - 1200 m thick); 2) Altachinskaya (about 2000 m thick); 3) Nerchinskozavodskaya (up to 1500 m thick after new reports) and 4) Blagodatskaya (600 m thick). The last one was put into the Silur and marked as concordant lying on the Nerchinskozavodskaya (error by N. S. Gorshkov, who collected fossils out of the rubble, instead of in situ). In 1956 the authors determined a discordance and an interrup-

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tion between the two suites (4th and 3rd). According to the determination of the fauna (by I. P. Morozova, Ye. A. Ivanova, and N. Ya. Spasskiy), the Blagodatskaya suite has a Middle Devon age (perhaps the upper part of the Lower Devon included). A. A. Lokerman in 1957 found a fauna, which characterized the Nerchinskozavodskaya suite as belonging to the Ordovician. The suites 1 - 3 in the title mentioned area have neither a fauna nor reliable marker-horizons. The existence of overturned strata caused considerable difficulties in the mapping and often drew necessary information from the assumed stratigraphical scheme. So the existence of suite 3 was either denied by certain research workers or it was put together with suite 4. The reports of the recent years (G. I. Knyazev, S. P. Kruzin (1957), Yu. A. Alyushinskiy, Ye. Z. Isagulova) proved the correctness of the assumed scheme, but brought a few corrections to it. The Nerchinskozavodskaya suite is put into the Venlok stage of the Ordovician according to the fauna found (determinations by Ye. A. Ivanova, O. N. Nikiforova, and V. E. Kyrvel). A spores complex (determination by Ye. Z. Isagulova, proved by S. N. Naumova) dates as Upper Ordovician - Lower Silur (against B. V. Timofeyev, who puts these spores into Sinium - Lower

On Ordovician Deposits in South-Eastern Trangbaykal SOV/20-123-6-38/50

Cambrium). There are 2 Soviet references.

ASSOCIATION: Chitinskoye geologicheskoye upravleniye (Chita Geological Administration)

PRESENTED: July 9, 1958, by N. S. Shatskiy, Academician

SUBMITTED: July 5, 1958

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3(5)

AUTHORS: Kozerenko, V.N. and Lokerman, A.A. SOV/11-59-8-9/17

TITLE: On Lower Silurian Deposits of the South-Eastern Transbaykal Region

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 8, pp 100 - 104 (USSR)

ABSTRACT: The finding of numerous remains of fauna in the Lower Paleozoic strata of the Eastern Transbaykal region permitted the authors of this article to prove that the 3 suites of strata composing the Lower Paleozoic series were formed in the interval of time between the Lower Cambrian and the Upper Silurian periods. Most ore deposits of the polymetallic belt of the Eastern Transbaykal region are associated with the Lower Paleozoic strata of rocks. As a result of a geological survey by D.I. Gorzhevskiy, N.S. Gorshkov, V.N. Kozerenko, Ye.M. Laz'ko, G.B. Mitich and A.F. Mushnikov, the Lower Paleozoic strata were divided into 4 suites: 1) the Bystrinskaya suite, composed of limestones and

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dolomitic limestones with seams of phyllitic schists (1,000 - 1,200 m thick); 2) the Altacha suite - argillaceous and phyllit-like schists and aleurolites with seams of limestones and sandstones (about 2,000 m thick); 3) the Nerchinskiy Zavod suite - dolomites and dolomitic limestones with seams of marly-argillaceous schists (about 1,500 m thick) and 4) the Blagodatskaya suite - argillites with seams of quartzites and limestones (600 m thick). The age of the Bystrinskaya suite was determined when G.I. Knyazev and S.P. Kruzin found ancient remains of Archaeocyatha belonging to the Lower - Middle Cambrian period. The age of the Atacha suite and of the lower part of the Nerchinskiy Zavod suite was fixed by Yu.A. Alyushinskiy and Ye.Z. Isagulova, who found pollen and spores in these suites, as belonging to the Middle Cambrian - Ordovician interval. Finally A.A. Lokerman and N.I. Parkhomets found in the upper part of the Nerchinskiy Zavod suite remains of fauna which classified this upper part as belonging to the Lower Silurian period.

At the same time, and contrary to findings of N.S. Gorshkov, it was established that the Blagodatskaya suite does not belong to the Silurian Period and that it covers unconformingly the Nerchinskiy Zavod suite. The fauna in the upper part of the Nerchinskiy Zavod suite in the region of Mount Blagodatskaya was identified by Ye.A. Ivanova, O.N. Nikiforova and B.E. Kyrvel as belonging to the Wenlock stage of the Lower Silurian period. A study of the cross section of the Nerchinskiy Zavod suite showed a conformable structure of the suite and a gradual transition of marly, thinly seamed limestones into marly-argillaceous schists which contain the above mentioned Siliurian fauna. This conformity was also observed by K.D. Sholkin, L.N. Lenok, K.F. Kuznetsov, A.N. Svirskiy and M.I. Stetsyuk. This proves, say the authors, that strata of the Nerchinskiy Zavod suite are part of one complex. The study by Ye.Z. Isagulova (later confirmed by S.N. Naumova) of spores and pollen found in the underlying carbonaceous stratum also proves that the

upper part of the Nerchinskiy Zavod suite and this stratum form a single complex (by age). The marly schists of the upper part of the Nerchinskiy Zavod suite are covered with a sharp unconformity by beds of the Blagodatskaya suite, composed of quartzites, variegated argillites and of greyish-brown siliceous schists. Fauna collected in the argillites was identified by I.P. Morozova, Ye.A. Ivanova, N.Ya. Spasskiy and Ye.A. Modzalevskaya; this showed that the Blagodatskaya suite belonged to the Lower Devonian Period. It proved that the 3 first suites belonging to the Lower Paleozoic series were formed between the Lower Cambrian and the Lower Silurian period. The presence of Ordovician deposits in the East Transbaykalian region, questioned by some geologists, was thus proved. There are 2 Soviet references.

On Lower Silurian Deposits of the South-Eastern Transbaykal Region SOV/11-59-8-9/17

ASSOCIATION: Vsesoyuznyy zaochnyy politekhnicheskiy institut, Moskva (All-Union Correspondance Polytechnical Institute, Moscow)

SUBMITTED: March 17, 1959

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KOZERENKO, V. I. and STARCHENKOV, V. V.

"Metallogeny of Central and Eastern Zabaykal'ye"

report presented at the First All-Union Conference on the Geology and Metallurgy of the Pacific Ocean Ore Belt, Vladivostok, 2 October 1960

So: Geologiya Rudnykh Mestorozhdeniy, No. 1, 1961, pages 119-127

KOZERENKO, V.N.

Importance of structural and facies zones for the metallogenetic analysis as revealed by eastern Transbaikalia. Zakon.razm. polezn.iskop. 3:441-459 '60. (MIRA 14:11)

1. Vsesoyuznyy zaochnyy politekhnicheskiy institut.
(Transbaikalia—Ore deposits)

GORZHEVSKIY, D.I.; KOZERENKO, V.N.

Some features of the metallogeny of the folded basements of platforms. Razved. i okh. nedr 26 no.9:7-11 S '60. (MIRA 15:7)

1. L'vovskiy universitet (for Gorzhevskiy). 2. Vsesoyuznyy zaochnyy politekhnicheskiy institut (for Kozerenko).
(Ore deposits)

KOZERENKO, V.N.

(19)

Baku, 18-23 Sept 1962
Regularities in the Formation and Distribution of Endogenous
Mineral Resource Deposits, S/011/63/000/001/002/002
The Third All-Union Conference on... A006/A101

Group 2 included reports on endogenous deposits in other synclinal regions, such as mercury formations in Siberia and the Far East (V. A. Kuznetsov), pyrite deposits in the Ural (S. N. Ivanov), Kimeridgian and Alpine metallogeny in Uzbekistan (I. Kh. Khamrabayev); ore region types in the Pacific area (Ye. A. Radkevich); metallogeny in Tadzhikistan (K. I. Litvinenko); hydrothermally transformed rocks in the Trans-Carpathian region (M. Yu. Fishkin) peculiarities in magmatism and metallogeny of the Mountaneous Crimea (V. Y. Lebedinskiy), antimony-mercury fields (M. A. Karasik) and others. Group 3 included reports on the classification of metallogenous zones and provinces of the Earth crust (D. I. Gorzhevskiy); classification of metallogenous zone types of the Earth crust (V. N. Kozerenko); classification of magmatogenous non-metallic mineral resources as a basis of prognoses and prospecting (V. P. Petrov); types of metallogenous provinces in synclinal regions of the USSR (A. I. Semenov); principles of geological zoning on the example of Central Asia (K. I. Babayev); comparative characteristics of metallogeny in Malyy Caucasus and the Kamchatka-Koryak zone (I. G. Magak'yan), some particularities of metallogeny in the Mediterranean geosynclinal region (G. A. Tvalchrelidze); rootless plutons and some peculiarities in the magmatism of moving zones (A. P. Lebedev); paragenetic ore complexes (P. S. Saakyan) the part of deep-lying breaks in metallogeny of syncline regions on the example of the Caucasus (E. Sh. Shikhalibeyli). The closing report was read by A. V. Sidorenko, Minister of Geology and Preservation of Mineral Resources of the USSR.

Izvestiya Ak nauk SSSR, Seriya Geologicheskaya, No. 1, 1963, pp 126-128

KOZERENKO, V.N.

Geological characteristics of the complex metal zone in the Argun Valley. Trudy IGEM no.83:7-30 '63. (MIRA 16:11)

GORZHEVSKIY, D.I.; KOZERENKO, V.N.

Facies of abyssal igneous rocks and endogenetic mineral deposits.
Sov.geol. 6 no.8:3-16 Ag '63. (MIRA 16:9)

1. L'vovskiy gosudarstvennyy universitet i Vsesoyuznyy zaochnyy politekhnicheskiy institut.
(Ore deposits) (Rocks, Igneous)

GORZHEVSKIY, D.I.; KOZERENKO, V.N.

Classification of the types of metallogenetic zones of the earth's crust. Zakonom.razm.polezn.iskop. 7:390-391 '64. (MIRA 17:6)

1. Moskovskiy politekhnicheskiy institut i L'vovskiy gosudarstvennyy universitet.

GORZHEVSKIY, David Iosifovich; KOZERENKO, Vladimir Nikolayevich; SMIRNOV, V.I., akademik, red.

[Relation of endogene ore formation to igneous activity and metamorphism; introduction to the metallogeny of the endogenetic processes of ore formation] Sviaz' endogennogo rudoobrazovaniia s magmatizmom i metamorfizmom; vvedenie v metallogeniiu endogennykh protsessov rudoobrazovaniia. Moskva, Nedra, 1965. 299 p. (MIRA 18:5)

GORZHEVSKIY, D.I.; KOZERENKO, V.N.

Classification of the metallogenic zones of the earth's crust. Izv.vys.ucheb.zav.; geol. i razv. 8 no.1:65-74 Ja '65. (MIRA 18:3)

1. TSentral'nyy nauchno-issledovatel'skiy gorno-razvedochnyy institut i Vsesoyuznyy zaochnyy politekhnicheskiy institut.

ARISTOV, V.V.; KREMDELEV, F.P.; KREYTER, D.S.; RUSHLOV, L.A.; RAMUSHKIN, V.A.; TROFIMOV, N.N., prepod. KREYTER, V.M., prof., retsenzent; AL'BOV, M.N., prof., retsenzent; KOZERENKO, V.N., prof., retsenzent; KRAYNO, S.V., st. prepod., retsenzent; BELYAKOVA, Ye.V., red.

[Manual for laboratory work in the course on prospecting and exploration for mineral deposits] Rukovodstvo dlia prakticheskikh zaniatii po kursu poiskov i razvedki mestorozhdenii poleznykh iskopaemykh. Moskva, Vysshaia shkola, 1965. 253 p. (MIRA 18:9)

KOZERITSKIY, G.I.

Transporting details of large-panel houses. Transp.stroi. 9 no.6: 19-21 Je '59. (MIRA 12:11)

1. Glavnyy inzhener tresta "Ufimtransstroy."
(Concrete slabs--Transportation)

KOZEREVSKIY, P.; IRMAN, J.; ORA, A., red.; PEDARI, J., tekhn. red.

[Growing sugar beets at low labor costs] Suhkrupeedi kasvatamine vähese tööjõukuluga. Tallinn, Eesti Riiklik Kirjastus, 1962. 63 p. (MIRA 17:1)

FATKULLIN, Z.S.; KOZERITSKIY, G.I., inzh.

Constructing large-panel houses. Transp.stroi. 9 no.9:
26-28 S '59. (MIRA 13:2)

1. Nachal'nik tresta Ufimtransstroya (for Fatkullin).
(Apartment houses)
(Precast concrete construction)

KOZERITSKIY, G.I.

Provide construction projects with high-quality tools. Transp. stroi. 10 no.6:61-62 Je '60. (MIRA 13:7)

1. Glavnyy inzhener tresta Ufimtransstroy.
(Building--Tools and implements)

KOZERITSKIY, G.I.

The construction trust needs effective help. Transp. stroi. 13 no.5:78 My '63. (MIRA 16:7)

1. Glavnyy inzh. tresta Kuybyshevtransstroy.
(Railroads—Construction)
(Precast concrete construction)

KOZERITSKIY, G.N.

Reusable molds for making reinforced concrete headbands for supports of portals. Transp.stroi. 10 no.1:56 Ja '60.
(MIRA 13:6)

1. Glavnyy inzhener Ufimtransstroya.
(Moldings)

BULGARIA/Cultivated Plants. Fruits. Cherries. K

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68354

Author : Kozerkov, Aleksandr
Inst : Dobrudzha Scientific Research Institute.
Title : Testing Certain Prospectively Useful Plum Strains for Production.

Orig Pub : The Dobrudzha Scientific Research Institute investigated and described 26 plum strains, among them some which are unknown or relatively unknown, but which have valuable qualities for extensive utilization. A short pomological description is given of those plum strains which appear to be most valuable for future use. Tuleu gras, a local Rumanian variety, is little used in Bulgaria. It is quick-ripening, however, bears fruit regularly, produces high yields, and bears fruit of high

Card : 1/3

quality. In terms of the taste qualities of its fruit and of the ripening of its fruit, No 459 is not inferior to Tuleu gras. No 205 is a drought-resistant, high-yield strain which ripens 5-7 days earlier than the standard strain. Its fruit is also of high quality. Renklod Al'tana is very little grown; its fruit is of high quality, and it is especially recommended for regions with a well developed canning industry. The Azhanskaya plum is a desert strain. It is grown in regions whose conditions resemble Dobrudzha conditions and produces technically high yields. The fruit of Alekovo No 1 has excellent taste qualities; this strain deserves to be tested

BULGARIA/Cultivated Plants. Fruits. Berries. H

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68354

for production. No 277 is a strain of high-yield qualities. It bears fruit regularly and produces high-quality fruit. -- Ye. T. Zhukovskaya

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KOZEROVSKIY, I.N., inzh.; SMELOV, V.A., inzh.

Erection of breakwaters with the use of tetrapods. Transp.stroi. 13 no.9:32-33 S '63. (MIRA 16:12)

KOZEROVSKIY, V.

Improving friction screw presses. Mashinostroitel' no.12:17 L '61. (MIRA 14:12)
(Power presses--Technological innovations)

KOZEROVSKIY, V.A., tekhnik

A semiautomatic device for butt-welding electric wires. Prom. energ. 18 no.2:19 F '63. (MIRA 16:2)
(Electric lines--Welding)

KOZERSKI, S.

Poland as exporter and importer of wood, cellulose, and paper products. p. 161.

PRZEMYSL DRZEWNY. Centralne Zarzady Przemyslow: Drzewnego, Meblarskiego, i Lesnego i Stowarzyszenie Inzynierow i Techników Lesnictwa i Drzewnictwa. Warszawa, Poland. Vol. 9, No. 6, June 1958.

Monthly List of East European Accession (EEAI), LC, Vol. 8, No. 9, Sept. 1959.

Uncl.

KOZERSKI, S.

Polish lumber on the world markets. p. 175
PRZRMYSL CRZEWNY. Centralne Zarzady Przemyslow: Drzewnego, Meblarckiego, i Lesnego i Stowarzyszenie Inzynierow i Technikow Lesnictwa i Drzewnictwa. Warszawa, Poland. Vol. 9, no. 6, June 1958.

Monthly List of East European Accession (EEAI), LC, Vol. 8, No. 9, September, 1959.

Uncl.

KOZERSKI, T.

Kozerski T.

Hempel S. and Kozerski T. "Laboratory and Semi-Technical Apparatus for Hydrogenation of Fatty Oils under Atmospheric Pressure." (Aparatura laboratoryjna i poltechniczna do uwodorniania olejow tluszczowych pod cisnieniem atmosferycznym). Przemysl Chemiczny, No. 5, 1950, pp. 299-301, 4 figs.

A description of two different installations for hydrogenating fatty oils under atmospheric pressure: for 1.000 g and 10 kg oil. Oil is stirred by a mechanical mixer which sucks up liquid, together with hydrogen and pulverisation in the form of emulsion. The installations are cooled in order to remove the heat generated and to keep up the required temperature. A specially constructed sealing in the semi-technical apparatus ensures protection against hydrogen losses.

SO: Polish Technical Abstracts - No. 2, 1951

KOZERSKI, T.; LADA, Z.

A bomb for the manometric determination of moisture by acetylene method. p. 379.

CHEMIA ANALITYCZNA. (Komisja Analityczna Polskie Akademii Nauk i Naczelna Organizacja Techniczna) Warszawa. Poland. Vol 4, No. 1/2, 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 8, August 1959 Uncla.

SHOROKHOVA, Yekaterina Vasil'yevna; KOZERUK, V., red.; NEYMAN, F., mladshiy red.; CHEPELEVA, O., tekhn. red.

[The problem of consciousness in philosophy and natural science] Problema soznaniia v filosofii i estestvovedenii. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1961. 362 p. (MIRA 15:1)
(Consciousness)

KOZESNIK, B.

WEIS, T.; KOZESNIK, B.

Effect of cooling of the organism on the course of tetanus intoxication. Chekh. fisiol. 3 no.1:83-90 1954.

1. Institut fiziologii Chekhoslovatskoy Akademii Nauk, Praga.
(TETANUS, experimental,
eff. of cold)
(COLD, effects,
on exper. tetanus)

KOZESNIK, B.

WEISS, T.; KOZESNIK, B.

Convulsion threshold during tetanus toxin poisoning as the index of the functional state of the central nervous system. Chekh. fiziol. 3 no.4:432-436 1954.

1. Fiziologicheskiy institut Chekhoslovatskoy Akademii nauk, Praga.
(CENTRAL NERVOUS SYSTEM, function tests,
convulsion threshold to tetanus toxin as index of CNS funct.)
(TETANUS,
toxin, convulsion threshold in toxin pois. as index of CNS funct.)
(CONVULSIONS,
threshold to tetanus toxin as index of CNS funct.)

KOZESNIK, J.

"Research on the theory of information and automation."

AUTOMATISACE, Praha, Czechoslovakia, Vol. 2, No. 7, July 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

KOZESNIK, Jan; KOHL, Jan

Experience with the automatic block system on Prague Railways. Zel dop tech 9 no.9:282-284 '61.

(Railways)

KOZESNIK, Jaroslav, akademik; BLASKOVIC, Dionyz, akademik; KOLMAN, Arnost, akademik; MACURA, Jiri, dr.; VANA, Josef; GOSIOROVSKY, Milos; BOHM, Jaroslav, akademik; PROCHAZKA, Jaroslav, prof., dr.; HAMPEJS, Zdenek, dr.; BRABEC, Frantisek, prof, inz., dr.; SORM, Frantisek, akademik; NOVAK, Josef, akademik; NEUMANN, Jaromir, doc., dr.; BAZANT, Vladimir, inz., dr.; KOUNOVSKY, Bohumil, dr.; SZANTO, Jan, dr.; ROZSIVAL, Miroslav, dr.; KASPAR, Jan, dr.; HANKA, Ladislav, prof., inz.; STRNAD, Julius; WICHTERLE, Otto, akademik; ZATOPEK, Alois; JAVORNICKY, Jan, inz.; VAVRA, Jaroslav, dr.; BLATTNY, Ctibor, akademik; ONDRIS, Karol, dr.; KUKAL, Vaclav, inz.

The 22d Congress of the Communist Party of the Soviet Union and the tasks of Czechoslovak science; discussion. Vestnik CSAV 71 no.1:3-59 '62.

1. Hlavni vedecky sekretar Ceskoslovenske akademie ved (for Kozesnik). 2. Clen korespondent Ceskoslovenske akademie ved (for Vana, Gosiorovsky, Kaspar, Strnad, Zatopek). 3. Rektor Karlovy university (for Prochazka). 4. Rektor Ceskeho vysokeho uceni technickeho (for Brabec). 5. Namestek presidenta Ceskoslovenske akademie ved (for Sorm)

KOZESNIK, Jaroslav, akademik

Academician Bedrich Hacar, obituary. Vestnik CSAV 73 no. 1: 124-127 '64.

KOZESNIK, J.

Conditions of physical similarity in investigations of the strength and natural frequency of machine parts. p. 73.
(POZPRAVY, vol. 65, no. 1, 1954, Praha)

SO: Monthly List of East European Accession, (EEAL) Vol. 4, No. 11, Nov. 1955, Uncl.

KOZESNIK, J.

Periodical state in a system with constant parameter. p. 1.

Vol. 65, no. 5, 1955
ROZPRAVY RADA TECHNICKO-VEDECKA
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5 No. 4 April 1956

25(2) PHASE I BOOK EXPLOITATION CZECH/1245

Kozesnik, Jaroslav, Professor, Engineer, Doctor, Corresponding Member, Czechoslovak Academy of Sciences

Dynamika stroju; vybrane stati (Dynamics of Machinery; Selected Topics) Prague, SNTL, 1958. 334 p. 2,400 copies printed.

Reviewer: Skoda, Jiri, Engineer; Chief Ed.: Cihak, Vlastimil, Engineer; Resp. Ed.: Husarek.

PURPOSE: This book is intended for workers in research institutes, universities, and colleges, and for practicing engineers and students.

COVERAGE: The book is described as the first of its kind in Czech literature and also as differing in concept and content from similar publications abroad. The author states that, despite the subtitle "Selected Topics", the reader can find in the book a solution to almost all important problems of the dynamics of machinery. The great number of references enables the reader to go into special problems which are not discussed in the book. The author's intention is to

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familiarize the reader with modern design methods useful in the dynamics of machinery, so that the reader may solve his own problems and improve existing methods. The methods used in the book are not too complex and do not require special mathematical knowledge. The author thanks the reviewer of the book, Jiri Skoda, Candidate of Sciences Karel Julis, Engineer, and Cenek Zikmund, Engineer, for their help in preparing the book. There are 65 references, of which 19 are Czech, 18 German, 15 English, 12 Soviet, and 1 Polish.

TABLE OF CONTENTS:

Dynamics of Machinery (Cont.) CZECH/1245

AVAILABLE: Library of Congress

KOZESNIK, Jaroslav

The computation of critical frequencies based upon independent deformations. Acta tech Cz 5 no.6:503-515 '60. (EEAI 10:4)

1. Czechoslovak Academy of Sciences, Praha.
(Functions)

KOZHESHNIK, Yaroslav [Kozesnik, Jaroslav], prof., inzh. doktor; GOL'DENBERG, G.M., inzh.[translator]; ARBUZOV, V.N., kand. tekhn. nauk, red.; BYSTRITSKAYA, V.V., red. izd-va; MODEL', B.I., tekhn. red.

[Dynamics of machinery; selected works] Dinamika mashin; izbrannye stat'i. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1961. 423 p. (MIRA 15:1)
(Machinery) (Mechanical movements)

38194
S/044/62/000/005/035/072
C111/C444

16.6100

AUTHOR: Kožešník, Jaroslav

TITLE: On the renewal theory

PERIODICAL: Referativnyy zhurnal, Matematika, no. 5, 1962,24, abstract 5V117. ("Acta techn." (CSSR), 1961, 6, no. 5, 419-426)

TEXT: Considered is a system of N machines. Every machine consists of two parts which temporarily fall out and are substituted by reserve parts. During the period Δt the falling out of the first part of the machine happens with the probability $(\lambda_1/N)\Delta t + O(\Delta t)$, the falling-out of the second part happens with the probability $(\lambda_2/N)\Delta t + O(\Delta t)$; the probability of a falling-out of both parts at the same time is $(\mu/N)\Delta t + O(\Delta t)$. The falling-outs at different machines are independent on each other and independent on the moment of former falling-outs. If A(t) and B(t) indicate the number of the parts of the machine of the first and second type which fall out in the moment t, then this two-dimensional process is a Markov process. The author sets up equations for $P(A, B, t) = P\{A(t) = A, B(t) = B\}$ and solves them by Laplace transformation; there is.

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S/044/62/000/005/035/072
C111/C444

On the renewal theory

$$P\{A, B, t\} = \sum' \frac{\lambda_1^n \cdot \lambda_2^k \cdot \mu^m}{n!\, k!\, m!} \cdot t^{n+k+m} e^{-(\lambda_1+\lambda_2+\mu)t} \qquad (1)$$

where $\sum'$ means summation only on those n, m, k for which holds n+m = A, k+m = B. Then the author determines the moments MA(t), MB(t), MA(t)B(t). Note of the referent: formula (1) can easily be obtained, if one considers that $A(t) = \xi_1(t) + \eta(t)$, $B(t) = \xi_2(t) + \eta(t)$, where $\xi_1(t)$, $\xi_2(t)$, $\eta(t)$ are Poisson flows being independent to each other, with the intensities λ_1, λ_2 and μ.

[Abstracter's note: Complete translation. The reviewer is M. K. Belyayev].

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Z/048/62/000/010/001/003
D409/D301

AUTHOR: Kožešník , Jaroslav, Academician, Bearer of the Labor Medal, Deputy Chairman of the Czechoslovak Academy of Sciences

TITLE: Science - Progress - Communism

PERIODICAL: Věda a technika mládeži, no. 10, 1962, 328 - 329

TEXT: This is an interview on cybernetics, given by Academician J.Kožešník, also Director of the Institute of Information Theory and Automation. Kožešník generally describes cybernetics as an interdisciplinary science for seeking methods to study control and communication processes in complex systems, finding common characteristics, determining changes occurring in the system, and tracking the laws governing these changes. The notion system in this sense may incorporate machines, organisms, organizations, etc. Similar or analogous phenomena are often studied with the aid of models. These models serve a dual purpose: (1) to facilitate the

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mathematical description of the studied phenomena; (2) to derive the function of the system itself from the behavior of the model. The behavior of a complex system is commonly investigated dependent on time with the aid of the probability and random-process theory, both notions taken from communication engineering. Also the theory of probability has its models, namely the urn model. Cybernetics find their widest application in automatic control systems. The Institute for Information Theory and Automation is working on the solution of an automatic control system using digital computers for large thermal power plants. There is also great interest in systems with the adaptability to compensate even for errors in their own design. Such systems are capable of "thinking"; however, cybernetics are not yet able to reach that state of organization, complexity, and philosophy as is found in organisms. Another interesting field of cybernetics is the theory of games. There are 3 figures.

ASSOCIATION: Ústav teorie informace a automatizace ČSAV (Institute of Information Theory and Automation, Czechoslovak AS)

KOZESNIK, Jaroslav, akademik

Effect of the diameter of grinding wheels on its output in the BPH surface grinding machines; a discussion. Stroj vyr 10 no.12:621 '62.